

## Sensor/actuator cable - SAC-3P-MS/ 0,6-600/M 8FR-2L FB - 1406499

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Sensor/actuator cable, 3-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M8, on Socket angled M8, with 2 LEDs, cable length: 0.6 m, Hygienic design, with plastic knurl

### Why buy this product

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Easy to clean, thanks to the special hygienic design
- ✓ Contamination can be detected quickly – thanks to the light color
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 STK                                                                                                   |
| GTIN         | <br>4 046356 780711 |
| GTIN         | 4046356780711                                                                                           |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.6 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Ambient temperature (operation) | -40 °C ... 105 °C (Plug / socket) |
| Degree of protection            | IP65                              |
|                                 | IP67                              |
|                                 | IP68                              |
|                                 | IP69K                             |

#### General

|                       |         |
|-----------------------|---------|
| Rated current at 40°C | 4 A     |
| Rated voltage         | 24 V    |
|                       | 24 V DC |

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## Technical data

### General

|                              |                                          |
|------------------------------|------------------------------------------|
| Number of positions          | 3                                        |
| Insulation resistance        | ≥ 100 MΩ                                 |
| Coding                       | A - standard                             |
| Standards/regulations        | M8 connector IEC 61076-2-104             |
|                              | Material conformance FDA 21 CFR 177.2600 |
| Status display               | 2 LEDs                                   |
| Protective circuit/component | Unwired                                  |
| Overvoltage category         | II                                       |
| Degree of pollution          | 3                                        |
| Insertion/withdrawal cycles  | ≥ 100                                    |
| Torque                       | 0.2 Nm (M8 connectors)                   |

### Material

|                          |               |
|--------------------------|---------------|
| Contact material         | CuSn          |
| Contact surface material | Ni/Au         |
| Contact carrier material | PP            |
| Material of grip body    | PP            |
| Material, knurls         | Polypropylene |
| Sealing material         | FKM           |

### Standards and Regulations

|                       |                      |
|-----------------------|----------------------|
| Standard designation  | M8 connector         |
| Standards/regulations | IEC 61076-2-104      |
| Standard designation  | Material conformance |
| Standards/regulations | FDA 21 CFR 177.2600  |

### Cable

|                                            |                                |
|--------------------------------------------|--------------------------------|
| Cable type                                 | Halogen-free PP gray           |
| Cable type (abbreviation)                  | 600                            |
| Cable abbreviation                         | Li9Y14Y                        |
| Conductor cross section                    | 3x 0.25 mm² (Signal line)      |
| AWG signal line                            | 24                             |
| Conductor structure signal line            | 32x 0.10 mm                    |
| Core diameter including insulation         | 1.17 mm ±0.02 mm (Signal line) |
| Thickness, insulation                      | ≥ 0.21 mm (Core insulation)    |
| Wire colors                                | brown, blue, black             |
| Overall twist                              | 3 wires, twisted               |
| Length of twist, overall twist             | 40 mm                          |
| External sheath, color                     | gray RAL 7035                  |
| Outer sheath thickness                     | approx. 0.8 mm                 |
| External cable diameter D                  | 4.2 mm ±0.15 mm                |
| Minimum bending radius, fixed installation | 5 x D                          |

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## Technical data

### Cable

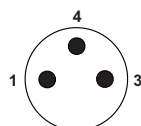
|                                                 |                                                                                   |
|-------------------------------------------------|-----------------------------------------------------------------------------------|
| Minimum bending radius, flexible installation   | 10 x D                                                                            |
| Number of bending cycles                        | 4000000                                                                           |
| Minimum bending radius, drag chain applications | 10 x D                                                                            |
| Traversing path                                 | 10 m                                                                              |
| Traversing rate                                 | 3 m/s                                                                             |
| Acceleration                                    | 10 m/s <sup>2</sup>                                                               |
| Torsion force                                   | ± 270 °/m (4,000,000 torsion cycles, max. 25 torsion cycles/min)                  |
| Cable weight                                    | 19 kg/km                                                                          |
| Outer sheath, material                          | PP-EPDM                                                                           |
| Material conductor insulation                   | PP                                                                                |
| Conductor material                              | Bare Cu litz wires                                                                |
| Insulation resistance                           | ≥ 1 GΩ*km (at 20 °C)                                                              |
| Conductor resistance                            | 78 Ω/km (at 20 °C)                                                                |
| Nominal voltage, cable                          | ≤ 300 V AC                                                                        |
| Test voltage, cable                             | ≥ 3000 V AC (Spark test)                                                          |
| Special properties                              | FDA compliant according to FDA 21 CFR 177.2600                                    |
|                                                 | highly flexible                                                                   |
|                                                 | Flexible cable conduit capable                                                    |
| Halogen-free                                    | in accordance with DIN VDE 0472 part 815                                          |
|                                                 | in accordance with DIN EN 50267-2-1                                               |
| Other resistance                                | Resistant to cold bending and cold impacts According to DIN EN 60811-1-4 (-40 °C) |
| Ambient temperature (operation)                 | -40 °C ... 105 °C (cable, fixed installation)                                     |
|                                                 | -25 °C ... 105 °C (cable, flexible installation)                                  |

### Environmental Product Compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

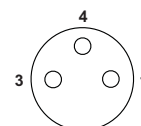
## Drawings

Schematic diagram



Pin assignment M8 plug, 3-pos., view male side

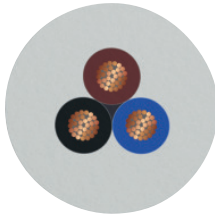
Schematic diagram



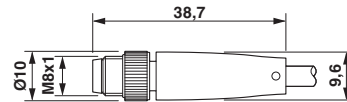
Pin assignment M8 socket, 3-pos., view female side

## Sensor/actuator cable - SAC-3P-MS/ 0,6-600/M 8FR-2L FB - 1406499

Cable cross section



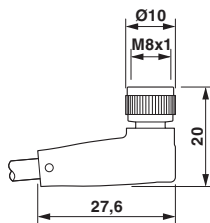
Dimensional drawing



Halogen-free PP gray [600]

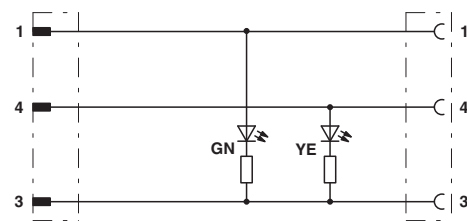
M8 x 1 male plug, straight version

Dimensional drawing



Socket M8 x 1, angled

Circuit diagram



Contact assignment of M8 plugs/sockets

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